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PATENT
317.1026**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In Re Application of:

Eldon Roth

Serial No.: 09/833,866

Filed: April 12, 2001

FOR: pH ENHANCED MEAT
COMPOSITION AND METHOD FOR
PRODUCING A pH ENHANCED
MEAT COMPOSITION

Group Art Unit: 1761

Examiner: Arthur L. Corbin

Facsimile No.: (703)872-9306

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450**APPEAL BRIEF**

This is an appeal from the Final Office Action mailed April 23, 2004, rejecting Claims 1, 3 through 20, and 22 in the above-identified application. Appellant submits this Appeal Brief to the Board of Patent Appeals and Interferences within the two-month period following the Notice of Appeal filed September 22, 2004.

This Appeal Brief is accompanied by a payment of \$340.00 representing the fee due under 37 C.F.R. § 41.20(b)(2).

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I. REAL PARTY IN INTEREST (37 C.F.R. §41.37(c)(1)(I))

The above-described patent application is assigned to Freezing Machines, Inc., the real party in interest.

II. RELATED APPEALS AND INTERFERENCES (37 C.F.R. §41.37(c)(1)(ii))

There is no related Appeal or Interference before the United States Patent and Trademark Office.

III. STATUS OF THE CLAIMS (37 C.F.R. §41.37(c)(1)(iii))

The status of the claims is as follows:

Allowed Claims: 21, 24, and 25

Claims to which Objections apply: None

Claims Canceled: 2 and 23

Claims Rejected: 1, 3 through 20, and 22

Claims Appealed: 1, 3 through 20, and 22

IV. STATUS OF AMENDMENTS (37 C.F.R. §41.37(c)(1)(iv))

The claim amendments filed July 23, 2004, in response to the April 23, 2004 Final Office Action have been entered as indicated by the Advisory Action mailed August 18, 2004. The claims reproduced in the accompanying Appendix reflect the state of the claims as they currently stand in this case after entry of the claim amendments filed July 23, 2004.

1 **V. SUMMARY OF CLAIMED SUBJECT MATTER (37 C.F.R. §41.37(c)(1)(v))**

2 The present invention relates to methods for producing a pH enhanced comminuted meat
3 composition where the comminuted meat is made up at least partially of small comminuted meat
4 pieces. (page 7, lines 1-9). One of these methods includes the steps of increasing the moisture
5 content of a comminuted meat composition, distributing the moisture throughout the
6 comminuted meat composition to produce a moisture enhanced meat composition, and producing
7 an ammonium hydroxide solution distributed throughout the comminuted meat composition.
8 (page 5, lines 18-21; page 9, lines 2-4; page 9, lines 12-14).

9 Another method of the present invention produces a pH enhanced comminuted meat
10 composition by adding water to a mass of comminuted meat, placing ammonia gas in contact
11 with the meat composition, and applying mechanical action to the meat composition after placing
12 the ammonia gas in contact with the meat composition and after adding water to the meat
13 composition. (page 7, line 17 - page 8, line 1; page 5, line 21 - page 6, line 2). This method
14 produces a moisture enhanced meat composition having the added water and an ammonium
15 hydroxide solution distributed throughout the moisture enhanced meat composition. (page 9,
16 lines 2-4; page 9, lines 12-14).

17 A pH enhanced comminuted meat composition may also be produced according to the
18 invention using a method including the steps of adding ammonium hydroxide solution to a mass
19 of comminuted meat and applying mechanical action to the comminuted meat after adding
20 ammonium hydroxide solution to distribute the ammonium hydroxide solution throughout the
21 mass of comminuted meat. (page 5 line 21 - page 6, line 2; page 8, lines 17-18; page 9, lines 12-
22 14).

An additional method for producing a pH enhanced comminuted meat composition includes adding ammonia to a comminuted meat to produce an ammoniated meat composition and adding water to the ammoniated meat composition. The method also includes applying mechanical action to the comminuted meat composition in order to distribute a resulting ammonium hydroxide solution throughout the comminuted meat. (page 5, line 21 - page 6, line 2; page 8, lines 7-8; page 9, lines 12-14).

The present invention also relates to a meat product produced by increasing the moisture content of a mass of comminuted meat composition to produce a moisture enhanced meat composition (page 5, lines 18-19; page 7, lines 1-9), by producing an ammonium hydroxide solution in the enhanced comminuted meat composition, and by then applying mechanical action to the moisture enhanced meat composition. (page 5, line 19 - page 6, line 2). The invention further encompasses a meat product produced in this fashion and then set in a desired form by applying heat, pressure, or both. (page 12, line 21 - page 13, line 5).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL
(37 C.F.R. §41.37(c)(1)(vi))

1. Claims 1, 3 through 13, and 22 stand rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 5,871,795 to Roth (the “795 patent”) in view of the Japanese publication by Nakayama, et al. (the “Nakayama reference” or “Nakayama”).

2. Claims 14-20 stand rejected under 35 U.S.C. 102(b) as being anticipated by the 795 patent or, in the alternative, under 35 U.S.C. 103(a) as being obvious over the 795 patent.

VIII. ARGUMENT (37 C.F.R. §41.37(c)(vii))

A. REJECTION UNDER 35 U.S.C. 103(a) OVER THE 795 PATENT IN VIEW OF NAKAYAMA

The Appellant respectfully submits that the Examiner's rejection of claims 1, 3 through 13, and 22 under 35 U.S.C. § 103(a) as being obvious over the 795 patent in view of Nakayama is in error because there is no suggestion or motivation in the prior art to combine the teachings of the references as proposed by the Examiner and because the references, considered individually or as properly combined, do not disclose each and every element set out in the claims.

1. There Is No Suggestion In The Prior Art To Make The Proposed Combination Of References

Claims 1, 3 through 13, and 22

In order to combine the teachings of different prior art references to make an obviousness rejection under 35 U.S.C. §103, there must be some teaching, motivation, or suggestion either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the references in the manner necessary to amount to the claimed invention.

However, there is no such teaching, motivation, or suggestion in the prior art to combine the 795 patent and Nakayama reference as proposed by the Examiner.

It is first noted that the 795 patent specifically teaches applying ammonia gas or a pH increasing material in a carrier gas to a meat product under certain conditions, namely at a pressure above the vapor pressure of the pH increasing gas at the temperature of the meat product

1 being treated, to increase the pH of the meat product in a short application period. (col. 2, lines
2 22-23 and col. 2, lines 57-63 of the 795 patent). As discussed beginning at the bottom of Col. 4
3 through Col. 5 of the 795 patent, the short gas pressure application period was used to overcome
4 adverse effects associated with extended exposure to the ammonia. Furthermore, the 795 patent
5 discloses using a gas in the treatment to apply a pressure effect on microbes in the meat product.
6 (col. 2, lines 36-38).

7 On the other hand, the Nakayama reference discloses applying ammonia gas and/or
8 ammonium hydroxide solution to eliminate undesirable odors from raw fowl meat. (p. 3,
9 paragraph 2 of Nakayama, it is noted that all references herein to the Nakayama reference are
10 references to the English translation of the reference submitted in the IDS of January 23, 2002.).
11 In particular, the latter half of page 3 of the Nakayama reference indicates that ammonia gas may
12 be applied by placing the meat in an ammonia gas atmosphere, and further indicates that
13 ammonium hydroxide solution may be sprayed onto the fowl meat or the fowl meat may be
14 immersed in the solution. That is, all of the ammonia or ammonium hydroxide treatments
15 disclosed in the Nakayama reference merely apply the ammonia or ammonium hydroxide to the
16 surface of the fowl meat. Nothing in the Nakayama reference teaches or suggests that an
17 ammonium hydroxide solution is mixed with a comminuted meat product so that the solution is
18 distributed throughout the meat product. In fact, such a distribution throughout the meat product
19 is inconsistent with the purpose of the treatment in Nakayama to eliminate odors which emanate
20 from the surface of the meat product. Such a distribution of added ammonium hydroxide
21 solution throughout a mass of comminuted meat product is certainly inconsistent with the
22 teachings of the 795 patent to limit exposure to ammonia to prevent the adverse affects of

1 prolonged ammonia exposure on the meat product as set out at Columns 4 and 5 of the 795
2 patent.

3 Claims 1, 3 through 13, and 22 all ultimately require adding moisture to a meat product
4 either as water or as an ammonium hydroxide solution and distributing that added moisture so
5 that an ammonium hydroxide solution is distributed throughout the meat product. All of the
6 appealed rejections for obviousness over the 795 patent in view of the Nakayama reference rely
7 on a particular combination of those references in order to meet the limitation that the
8 ammonium hydroxide solution is distributed throughout the meat product. In particular, these
9 rejections rely on the simple substitution of the ammonium hydroxide solution from the spray or
10 immersion taught in the Nakayama reference for the gas treatment material described in the 795
11 patent. This substitution of ammonium hydroxide solution for the gas treatment material in the
12 795 patent is evidenced by the statement in the Final Office Action that Nakayama teaches that it
13 was known at the time of the invention that ammonium hydroxide solution could be substituted
14 for ammonia gas in treating meat products. (Final Office Action, paragraph 7.)

15 The Appellant believes that the appealed rejections in view of the Nakayama reference
16 clearly overstate the teachings of that reference. The Nakayama reference did not, at the time of
17 the present invention, stand for the broad proposition that ammonium hydroxide solution may be
18 substituted for ammonia gas in every treatment application to meat products. Rather, Nakayama
19 teaches merely that ammonium hydroxide solution or ammonia gas may be applied to the surface
20 of fowl meat to reduce objectionable odors emanating from the fowl meat. This teaching does
21 not provide a suggestion or motivation to substitute ammonium hydroxide solution for the
22 treatment gas applied in the 795 patent. This is especially evident in light of the teaching in the

1 795 patent that exposure to ammonia must be minimized by a short gas treatment period to
2 prevent adverse affects in the treated meat product. 795 patent, bottom of Col. 4 through Col. 5.

3 It is noted that the Appellant does not argue that the 795 patent and the Nakayama
4 reference are not combinable in any fashion. That is, one skilled in the art at the time of the
5 present invention may have been prompted to apply the ammonia gas or ammonium hydroxide
6 treatment of Nakayama to the meat product resulting after the treatment disclosed in the 795
7 patent. However, combining the references in this way does not distribute added moisture or
8 added ammonium hydroxide solution throughout the meat product as required by the rejected
9 claims. In order for the added ammonium hydroxide solution to be distributed through the meat
10 product in the combination of the 795 patent and the Nakayama reference, the references must be
11 combined so that the ammonium hydroxide solution taught by Nakayama is used instead of the
12 treatment gas taught by the 795 patent. However, as discussed above, there is simply no
13 suggestion, teaching, or motivation in the references or elsewhere in the art to combine
14 Nakayama and the 795 patent in this fashion. Because there is no teaching or suggestion in the
15 Nakayama reference, the 795 patent, or elsewhere in the art to combine Nakayama and the 795
16 patent as proposed by the Examiner, the Examiner's proposed combination can only be the result
17 of impermissible hindsight in view of the teachings of the present invention.

18 For all of the above reasons, it would not have been obvious to one of ordinary skill in the
19 art at the time of the present invention to combine the teachings of the 795 patent and the
20 Nakayama reference in the manner proposed by the Examiner. Therefore, the Appellant submits
21 that the proposed combination is improper under 35 U.S.C. §103, and that claims 1, 3 through
22 13, and 22 are therefore entitled to allowance over the 795 patent and Nakayama reference.

2. The Cited References Do Not Suggest Each Required Element In The Claims

Claims 1 and 3 through 11

Independent claim 1 requires increasing the moisture content of a comminuted meat product, distributing the moisture content throughout the meat product, and producing an ammonium hydroxide solution distributed throughout the meat product. However, the 795 patent and the Nakayama reference, individually or as permissibly combined under 35 U.S.C. §103, do not teach or suggest distributing an added moisture content throughout the meat product, and distributing an ammonium hydroxide solution throughout the meat product as required by claim 1.

The 795 patent was cited for its disclosure that ammonia gas may be added to comminuted meat to raise the pH. (September 8, 2003 Office Action; paragraph 4). However, the 795 patent does not teach or suggest adding moisture to the comminuted meat along with the ammonia gas and also does not teach or suggest distributing added moisture throughout the meat product. The rejections rely on the Nakayama reference for a suggestion to substitute an ammonium hydroxide solution for the ammonia gas used in the 795 patent, with the water in the ammonium hydroxide increasing the moisture content of the meat product. (September 8, 2003 Office Action; paragraph 4). However, the Nakayama reference does not teach or suggest distributing added moisture throughout the meat product.

In the Final Office Action, the Examiner argued that distributing ammonium hydroxide solution throughout the meat product does in fact happen in the system disclosed in the 795 patent. (April 23, 2004 Office Action; paragraph 7). However, claim 1 does not merely require

1 distributing ammonium hydroxide solution throughout the meat product. Claim 1 requires
2 adding moisture to the meat product, distributing the added moisture throughout the meat
3 product, and distributing ammonium hydroxide solution throughout the meat product.

4 In the telephone interview conducted on July 19, 2004, the Examiner stated the position
5 that the Nakayama reference disclosed spraying ammonium hydroxide solution on a ground meat
6 product and that the resulting added ammonium hydroxide solution would be inevitably mixed
7 throughout the ground meat product. The Appellant submits that there is no technical basis for
8 the proposition that merely spraying ammonium hydroxide solution on a ground meat product
9 inevitably results in any mixing of ammonium hydroxide solution in the ground meat product.
10 Furthermore, even if it could be shown that some of the sprayed-on solution might seep into the
11 interior of the ground meat product, there is certainly no basis for the proposition that the added
12 ammonium hydroxide solution would inevitably be distributed throughout the meat product as
13 required by claim 1. Thus, the Appellant submits that the Examiner's reliance on the Nakayama
14 reference for the proposition of distributing added moisture throughout a comminuted meat
15 product is in error.

16 Because the cited references individually do not teach or suggest distributing the moisture
17 added to a comminuted meat product so that an ammonium hydroxide solution is distributed
18 throughout the meat product, and because no proper combination of the references results in such
19 a distribution of ammonium hydroxide, the Appellant submits that the 795 patent and Nakayama
20 do not teach or suggest each element required in independent claim 1. Therefore, the Appellant
21 submits that claim 1 is entitled to allowance together with its respective dependent claims, claims
22 3-11.

1 Claim 12

2 Independent claim 12 requires adding water to a mass of comminuted meat, placing
3 ammonia gas in contact with the meat composition, and applying mechanical action to the meat
4 composition after adding water to and placing ammonia gas in contact with the meat
5 composition. Claim 12 also requires that an ammonium hydroxide solution is distributed
6 throughout the moisture enhanced meat composition. However, as discussed above, the 795
7 patent and Nakayama individually do not teach or suggest applying mechanical action in order to
8 distribute added water and an ammonium hydroxide solution throughout a moisture enhanced
9 meat composition as required by claim 12, nor does any proper combination of those references
10 under 35 U.S.C. §103.

11 The Examiner relied on the 795 patent for a suggestion that ammonia gas may be added
12 to comminuted meat and the Nakayama reference to show that ammonium hydroxide solution
13 may be substituted for ammonia gas where the added water required by claim 12 comes from the
14 ammonium hydroxide solution. (September 8, 2003 Office Action; paragraph 4). The Examiner
15 also relied on the blender/agitator apparatus of the 795 patent to show that mechanical action is
16 applied to the meat composition. (September 8, 2003 Office Action; paragraph 4).

17 However, as stated with respect to independent claim 1 above, the 795 patent does not
18 teach or suggest adding water to the comminuted meat along with the ammonia gas and also does
19 not teach or suggest distributing the added water and ammonium hydroxide solution throughout
20 the meat composition. Nakayama does not compensate for this deficiency in the 795 patent as to
21 claim 12 because Nakayama also does not teach or suggest distributing added water and an
22 ammonium hydroxide solution throughout the meat product.

1 Because the cited references individually or as properly combined under 35 U.S.C. §103
2 do not teach or suggest distributing added water and an ammonium hydroxide solution
3 throughout the meat product, the Appellant submits that the 795 patent and the Nakayama
4 reference do not teach or suggest each element required in independent claim 12. Therefore, the
5 Appellant submits that claim 12 is entitled to allowance.

6
7 Claim 13

8 Independent claim 13 requires adding an ammonium hydroxide solution to a comminuted
9 meat product and distributing the ammonium hydroxide solution throughout the meat product by
10 applying mechanical action. As discussed above with respect to claims 1 and 12, the 795 patent
11 and the Nakayama reference taken individually or as properly combined do not teach or suggest
12 distributing an added ammonium hydroxide solution throughout a meat product.

13 Because the cited references do not teach or suggest distributing an ammonium hydroxide
14 solution throughout the meat product as required in claim 13, the Appellant submits that claim
15 13 is entitled to allowance over the 795 patent and the Nakayama reference.

16
17 Claim 22

18 Independent claim 22 requires adding ammonia to a comminuted meat product and then
19 adding water to the ammoniated meat composition. Claim 22 also requires applying mechanical
20 action to the comminuted meat composition after the ammonia and water have been added to it in
21 order to distribute a resulting ammonium hydroxide solution throughout the comminuted meat
22 product.

1 As previously discussed in connection with claims 1, 12, and 13, neither Nakayama nor
2 the 795 patent, nor any permissible combination of those references, teaches or suggests
3 distributing an ammonium hydroxide solution throughout a comminuted meat. Therefore, the
4 Appellant submits that claim 22 is entitled to allowance over the 795 patent and the Nakayama
5 reference.

6
7 B. REJECTION UNDER 35 U.S.C. 102(b) OR 35 U.S.C. 103(a) IN VIEW OF THE 795
8 PATENT

9
10 Claims 14-20

11
12 Claims 14-20 were rejected as either being anticipated by or obvious in view of the 795
13 patent. The Appellant believes the claims are not anticipated by nor obvious in view of the 795
14 patent because the 795 patent does not teach or suggest a moisture enhanced meat product as
15 required in claim 14 and its dependent claims, claims 15-20.

16 Claim 14 is directed to a meat product produced by adding moisture and having an
17 ammonium hydroxide solution distributed throughout the product. Claim 14 further requires that
18 the meat product is set in a desired form by applying heat, or pressure, or both heat and pressure
19 to the moisture enhanced meat composition.

20 In rejecting claim 14, the Examiner asserted that a packaged meat product produced
21 according to the 795 patent that has been blended, agitated, or chipped is equivalent to the meat
22 product required by claim 14. (April 23, 2004 Office Action, paragraph 6). However, as
23 discussed above, the 795 patent does not teach or suggest adding moisture and distributing an
24 ammonium hydroxide solution throughout the meat product, and certainly does not teach or

1 suggest setting the treated product by adding heat and/or pressure to the product. Because the
2 795 patent clearly fails to teach or suggest these limitations from claim 14, the claim cannot be
3 anticipated by the 795 patent, nor can it be obvious in view of the reference.

4 For these reasons the Appellant submits that claim 14 is not anticipated by, or obvious in
5 view of, the 795 patent, and is entitled to allowance together with its dependent claims, claims 15
6 through 20.

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VIII. CONCLUSION

For all of these reasons, the Appellant submits that claims 1, 3 through 20, and 22 are entitled to allowance, and respectfully requests that the Board reverse the decision of the Examiner rejecting these claims.

Respectfully submitted,

The Culbertson Group, P.C.

Date: November 22, 2004

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CERTIFICATE OF FACSIMILE

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, (Facsimile No. 703.872.9306) on November 22, 2004.

Russell D. Culbertson, Reg. No. 32,124 

IX. APPENDIX A**CLAIMS INVOLVED IN THE APPEAL (37 C.F.R. §41.37(c)(1)(vii))**

1. A method for producing a pH enhanced comminuted meat composition, the method including the steps of:
 - (a) increasing the moisture content of a comminuted meat composition and distributing the moisture throughout the comminuted meat composition to produce a moisture enhanced meat composition, the comminuted meat made up at least partially of small comminuted meat pieces; and
 - (b) producing an ammonium hydroxide solution distributed throughout the comminuted meat composition.
2. Canceled
3. The method of Claim 1 wherein the steps of increasing the moisture content in the comminuted meat and distributing the moisture throughout the comminuted meat composition and producing the ammonium hydroxide solution distributed throughout the comminuted meat composition are performed by adding a solution of ammonium hydroxide to the comminuted meat composition and thereafter applying mechanical action to the comminuted meat composition.

- 1 4. The method of Claim 1 wherein the step of increasing the moisture content of the
2 comminuted meat composition includes adding water to the comminuted meat
3 composition.
4
- 5 5. The method of Claim 4 wherein the step of producing the ammonium hydroxide solution
6 distributed throughout the comminuted meat composition includes contacting a surface of
7 the moisture enhanced meat composition with ammonia gas.
8
- 9 6. The method of Claim 5 further including step of applying a mechanical action to the
10 moisture enhanced meat composition after producing the ammonium hydroxide solution
11 in the meat composition to distribute the added moisture and ammonium hydroxide
12 solution throughout the moisture enhanced meat composition.
13
- 14 7. The method of Claim 1 wherein the moisture enhanced meat composition includes
15 seasonings and wherein the step of producing the ammonium hydroxide solution
16 distributed throughout the comminuted meat composition increases the pH of the
17 moisture enhanced meat composition to a pH above approximately 7.0.
18
- 19 8. The method of Claim 1 wherein moisture enhanced meat composition does not include
20 seasonings and the step of producing the ammonium hydroxide solution distributed
21 throughout the comminuted meat composition raises the pH of the moisture enhanced
22 meat composition to no greater than approximately 7.0.

1 9. The method of Claim 1 further including the steps of:

2 (a) placing the moisture enhanced meat composition into a desired shape after
3 producing the ammonium hydroxide solution distributed throughout the
4 comminuted meat composition; and

5 (b) setting the meat product in that desired shape.
6

7 10. The method of Claim 9 wherein the step of placing the moisture enhanced meat
8 composition into a desired shape includes containing the moisture enhanced meat
9 composition in a flexible container and placing the flexible container in a mold to force
10 the moisture enhanced meat composition into the desired shape.
11

12 11. The method of Claim 10 wherein the step of setting the moisture enhanced meat
13 composition in the desired shape comprises heating the moisture enhanced meat
14 composition to at least partially cook the composition.
15

16 12. A method of producing a pH enhanced comminuted meat composition, the method
17 including the steps of:

18 (a) adding water to a mass of comminuted meat, the comminuted meat being made up
19 at least partially of small comminuted meat pieces;

20 (b) placing ammonia gas in contact with the meat composition; and

21 (c) applying mechanical action to the meat composition after placing ammonia gas in
22 contact with the meat composition and after adding water to the meat composition

1 to produce a moisture enhanced meat composition having the added water and an
2 ammonium hydroxide solution distributed throughout the moisture enhanced meat
3 composition.
4

5 13. A method of producing a pH enhanced comminuted meat composition, the method
6 including the steps of:

7 (a) adding ammonium hydroxide solution to a mass of comminuted meat, the
8 comminuted meat being made up at least partially of small comminuted meat
9 pieces; and

10 (b) applying mechanical action to the comminuted meat after adding the ammonium
11 hydroxide solution to distribute the ammonium hydroxide solution throughout the
12 mass of comminuted meat.
13

14 14. A meat product produced by:

15 (a) increasing the moisture content of a mass of comminuted meat composition to
16 produce a moisture enhanced meat composition, the comminuted meat being
17 made up at least partially of small comminuted meat pieces and the moisture
18 enhanced meat composition having the increased moisture content being
19 distributed throughout the composition;

20 (b) producing an ammonium hydroxide solution in the moisture enhanced
21 comminuted meat composition;

1 (c) applying mechanical action to the moisture enhanced meat composition after
2 producing the ammonium hydroxide solution therein; and then

3 (d) setting the moisture enhanced meat composition in a desired form by applying
4 heat, or pressure, or both heat and pressure to the moisture enhanced meat
5 composition.
6

7 15. The meat product of Claim 14 wherein the steps of increasing the moisture content in the
8 comminuted meat and producing the ammonium hydroxide solution in the moisture
9 enhanced comminuted meat composition comprises the step of adding a solution of
10 ammonium hydroxide to the comminuted meat composition.
11

12 16. The meat product of Claim 14 wherein the step of increasing the moisture content of the
13 comminuted meat composition includes adding water to the comminuted meat
14 composition.
15

16 17. The meat product of Claim 16 wherein the step of producing the ammonium hydroxide
17 solution in the moisture enhanced comminuted meat composition includes contacting a
18 surface of the moisture enhanced meat composition with ammonia gas.
19

20 18. The meat product of Claim 17 further including step of applying mechanical action to the
21 moisture enhanced meat composition after producing the ammonia hydroxide solution
22 therein.

1
2 19. The meat product of Claim 14 wherein the moisture enhanced meat composition includes
3 seasonings and wherein the step of producing the ammonia hydroxide solution in the
4 moisture enhanced comminuted meat composition increases the pH of the moisture
5 enhanced meat composition to a pH above approximately 7.0.
6

7 20. The meat product of Claim 14 wherein moisture enhanced meat composition does not
8 include seasonings and the step of producing the ammonium hydroxide solution in the
9 moisture enhanced comminuted meat composition raises the pH of the moisture enhanced
10 meat composition to no greater than approximately 7.0.
11

12 21. (Allowed) A method for producing a pH enhanced comminuted meat composition, the
13 method including the steps of:

- 14 (a) increasing the moisture content of a comminuted meat composition to produce a
15 moisture enhanced meat composition, the comminuted meat composition being
16 made up of small comminuted meat pieces;
17 (b) producing an ammonium hydroxide solution in the comminuted meat
18 composition;
19 (c) applying mechanical action to the moisture enhanced meat composition after
20 producing the ammonium hydroxide solution in the comminuted meat
21 composition; and

(d) combining the moisture enhanced meat composition with a meat composition including large comminuted meat pieces.

22. A method for producing a pH enhanced comminuted meat composition, the method including the steps of:

(a) adding ammonia to a comminuted meat to produce an ammoniated meat composition, the comminuted meat made up at least partially of small comminuted meat pieces;

(b) adding water to the ammoniated meat composition; and

(c) applying mechanical action to the comminuted meat composition after adding ammonia thereto and after adding water thereto to distribute a resulting ammonium hydroxide solution throughout the comminuted meat.

23. Canceled

24. (Allowed) The method of Claim 21 wherein the steps of increasing the moisture content in the comminuted meat composition and producing the ammonium hydroxide solution in the comminuted meat composition are accomplished by adding a solution of ammonium hydroxide to the comminuted meat composition.

- 1 25. (Allowed) The method of Claim 21 wherein the step of increasing the moisture content
2 of the comminuted meat composition includes adding water to the comminuted meat
3 composition, and wherein the step of producing the ammonium hydroxide solution in the
4 comminuted meat composition includes contacting a surface of the moisture enhanced
5 meat composition with ammonia gas.